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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/244,163	02/04/1999	HIDENORI SHIOTSUKA	35.C13307	3414

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EXAMINER

WILLIAMS, ALEXANDER O

ART UNIT PAPER NUMBER

2826

DATE MAILED: 08/20/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/244,163

Applicant(s)

SHIOTSUKA ET AL.

Examiner

Alexander O Williams

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-- Th MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,9-11,20,21,23-27,33-35,41,44,45,47,48,51,55 and 73-80 is/are pending in the application.
- 4a) Of the above claim(s) 9-11,20,21,23-27,33-35,41,44,45,47,48 and 77-80 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,25-27,51,55 and 73-76 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 77-80 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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Serial Number: 09/244163 Attorney's Docket #: 35.C13307

Filing Date: 2/4/99;

Applicant: Shiotsuka et al.

Examiner: Alexander Williams

Applicant's Amendment in Paper # 19, filed 5/16/02 has been acknowledged.

This application contains claims 9-24, 33-48 and 57-64 drawn to an invention non-elected without traverse in Paper No. 6. A complete response to the final rejection must include cancellation of non-elected claims or other appropriate action (see 37 CFR § 1.144 & MPEP § 821.01).

Now, claims 4-8, 12-16, 18, 19, 22, 28-32, 36-40, 42, 43, 46, 49, 50, 52-54, 56-62 and 64-72 have been canceled.

Newly submitted claims 77 to 80 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

A method or process according to previous claim(s).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 77 to 80 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3, 51 and 73 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Takemura et al. (U.S. Patent # 6,184,577 B1) in view of Eranian et al. (U.S. Patent # 4,268,590).

For example, Takemura et al. (figures 1 and 2) specifically **figure 2** discloses a semiconductor device comprising a substrate **20**, a filler **41**, an exfoliative layer **40** and a semiconductor element **10** which is detachable from the substrate, wherein the exfoliative layer comprises an electron ray resin (**see column 5, lines 14-34**).

Takemura et al. fail to explicitly show a degradable resin.

Eranian et al. is cited for showing a photomasking composition. Specifically, Eranian et al. discloses resins compositions degradable not only by means of photon beams, but also by means of electron beams (see column 1, lines 5-15 and 49-55) for the purpose of masking products for making manufacturing masks for microelectronics.

Therefore, it would have been obvious to one of ordinary skill in the art to use the teaching of Eranian et al.'s degradable resin to modify Takemura et al.'s electron ray resin for the purpose of masking products for making manufacturing masks for microelectronics.

Claims 1-3, 25-27, 51, 55, 73 and 74 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mori et al. (U.S. Patent # 6,075,202) in view of Eranian et al. (U.S. Patent # 4,268,590).

For example, Mori et al. (figures 13C) specifically figures 1 and 7 discloses a solar cell module **1** comprising a substrate, a filler **3**, a photovoltaic element **2** which is detachable from the substrate (the support structure of 5,7,8), and a protective layer **4**, but fail to explicitly show the exfoliative layer, wherein the exfoliative layer comprises a electron ray degradable resin. However, Mori et al. does discloses a thermoplastic resin (see column 4, lines 10-21 and column 9, line 45-60) comprising a degradable resin in which can be used for the exfoliative layer have the same for the purpose of lowering electrical performance of the photovoltaic devices.

Eranian et al. is cited for showing a photomasking composition. Specifically, Eranian et al. discloses resins compositions degradable not only by means of photon beams, but also by means of electron beams (see column 1, lines 5-15 and 49-55) for the purpose of masking products for making manufacturing masks for microelectronics.

Therefore, it would have been obvious to one of ordinary skill in the art to use the teaching of Eranian et al.'s degradable resin to modify Mori et al.'s thermoplastic resin as the exfoliative layer for the purpose of lowering electrical performance of the photovoltaic devices.

Claims 75 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Takemura et al. (U.S. Patent # 6,184,577 B1) in view of Eranian et al. (U.S. Patent # 4,268,590) and further in view of Smith et al. (U.S. Patent # 6,153,299).

Takemura et al. and Eranian et al. show the features of the claimed invention as detailed above, but fail to explicitly show the exfoliative layer comprises at least one selected from the group consisting of polycarbonate, polyacetal and cellulose.

Smith et al. is cited for showing a colored articles and compositions. Specifically, Smith et al. discloses polymer resin layers can be of polycarbonate (see column 12, lines 36-51) for the purpose of producing composite articles.

Therefore, it would have been obvious to one of ordinary skill in the art to use Smith et al.'s exfoliative layer and the teaching of Eranian et al.'s degradable resin to modify Takemura et al.'s electron ray resin for the purpose of producing composite articles.

Claims 75 and 76 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mori et al. (U.S. Patent # 6,075,202) in view of Eranian et al. (U.S. Patent # 4,268,590) and further in view of Smith et al. (U.S. Patent # 6,153,299).

Mori et al. and Eranian et al. show the features of the claimed invention as detailed above, but fail to explicitly show the exfoliative layer comprises at least one selected from the group consisting of polycarbonate, polyacetal and cellulose.

Smith et al. is cited for showing a colored articles and compositions. Specifically, Smith et al. discloses polymer resin layers can be of polycarbonate (see column 12, lines 36-51) for the purpose of producing composite articles.

Therefore, it would have been obvious to one of ordinary skill in the art to use Smith et al.'s exfoliative layer and the teaching of Eranian et al.'s degradable resin to modify Mori et al.'s electron ray resin for the purpose of producing composite articles.

Response

Applicant's arguments filed 5/16/02 have been fully considered, but are moot in view of the new grounds of rejections detailed above.

The insertion of Applicant's additional claimed language, for example, "in claims 1, 25, 51, 55 and new claims 73-76" cause for further search and consideration to make this action final.

Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL

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EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

The listed references are cited as of interest to this application, but not applied at this time.

Field of Search	Date
U.S. Class and subclass: 257/433,466,459,632,787,788,790 136/249,257,251,285,256,244,259,291 438/64,66	12/2/01 8/15/02
Other Documentation: foreign patents and literature in 257/433,466,459,632,787,788,790 136/249,257,251,285,256,244,259,291 438/64,66	12/2/01 8/15/02
Electronic data base(s): U.S. Patents EAST	12/2/01 8/15/02

Papers related to this application may be submitted to Technology Center 2800 by facsimile transmission. Papers should be faxed to Technology Center 2800 via the Technology Center 2800 Fax center located in Crystal Plaza 4-5B15. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center 2800 Fax Center number is (703) 308-7722 or 24. Only Papers related to Technology Center 2800 APPLICATIONS SHOULD BE FAXED to the GROUP 2800 FAX CENTER.

Any inquiry concerning this communication or any earlier communication from the examiner should be directed to ***Examiner Alexander Williams*** whose telephone number is ***(703) 308-4863***.

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Any inquiry of a general nature or relating to the status of this application should be directed to the **Technology Center 2800 receptionist** whose telephone number is **(703) 308-0956**.

8/16/02

A handwritten signature in black ink, appearing to read 'Alexander O. Williams', written in a cursive style.

Primary Examiner
Alexander O. Williams